

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* HIROAKI SAEKI, MASAKI NARUSHIMA,  
TETSU OSAWA, YASUSHI TANIYAMA, and SHUUJI HAGIWARA

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Appeal 2007-2689  
Application 10/048,012  
Technology Center 3600

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Decided: November 16, 2007

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Before DEMETRA J. MILLS, NANCY J. LINCK, and RICHARD M.  
LEBOVITZ, *Administrative Patent Judges*.  
MILLS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal under 35 U.S.C. § 134 involves claims 1-7. We have  
jurisdiction under 35 U.S.C. § 6(b). We reverse.

Representative claim 1 follows.

1. A transfer system for transferring an object to be processed out of a carrier which is mounted on a top face of a load port unit and for transferring the object to the carrier, said transfer system comprising:

a system body having a bottom, a front wall vertical with respect to the bottom, and a guide rail provided so as to extend in lateral directions of said system body;

a linear motor having a secondary side provided so as to extend in lateral directions of said system body and a primary side movable to the secondary side; and

a transfer robot which is mounted on the primary side of said linear motor and which is capable of linearly reciprocating along the guide rail, wherein both said load port unit and the guide rail are mounted on the front wall of said system body, said load port unit is mounted on the outside of the front wall of said system body, and the guide rail is mounted inside of said front wall of said system body, the primary side and the secondary side have vertical oriented opposing faces, and the transfer robot transfers the object from and to the carrier positioned on the top face of the load port unit.

*Cited References:*

Teramachi	US 4,681,506	Jul. 21, 1987
Sakino	US 5,040,431	Aug. 20, 1991
Van Doren	US 5,733,096	Mar. 31, 1998
Akimoto	US 5,844,662	Dec. 1, 1998
Hendrickson	US 6,257,827 B1	Jul. 10, 2001

*Grounds of Rejection*

Claims 1 and 7 stand rejected under 35 U.S.C. § 103(a) as obvious over Hendrickson in view of Van Doren.

Claims 2 and 3 stand rejected under 35 U.S.C. § 103(a) as obvious over Hendrickson in view of Van Doren and Akimoto.

Claims 4 and 6 stand rejected under 35 U.S.C. § 103(a) as obvious over Hendrickson in view of Van Doren, Teramachi or Sakino.

## DISCUSSION

### *Obviousness*

Claims 1 and 7 stand rejected under 35 U.S.C. § 103(a) as obvious over Hendrickson in view of Van Doren.

The Examiner finds that Hendrickson describes a transfer system for transferring an object (a wafer) to be processed out of a carrier (cassette 73) which is provided on a top face of a load port unit (cassette holder 72 located in frame 68) for transferring the object to the carrier (cassette 73). (Answer 3.) According to the Examiner, the load port unit (72) is mounted on the front wall of the system body, the load port unit (68/73) is mounted on the outside of the front wall of the system body, and the guide rail is mounted on the inside of the front wall of the system body. (Answer 3.) The Examiner points to Figures 2 and 3 of Hendrickson in support of this position. (*Id.*)

The Examiner's obviousness conclusion is in error. Claim 1 requires that the "load port unit [be] mounted on the outside of the front wall of said system body, and the guide rail [be] mounted inside of said front wall of said system body." With respect to each ground of rejection, the Appellants argue the prior art "does not teach fixing the guide rails and load port unit to the same structure so that they are positionally fixed with respect to each other" (App. Br. 10, 12-13).

The Examiner found otherwise, pointing to Figures 2 and 3 of Hendrickson and Figure 30 of Van Doren (Answer 4-6). We do not find that Figure 3 of Hendrickson supports the Examiner's position. Figure 3 of Hendrickson does not show the load port unit (cassette) "mounted on the outside of the front wall of said system body". Figure 2 of Hendrickson (showing more detail of the load port unit) also fails to show such a

mounting. In our view, Figure 3 of Hendrickson does not depict a load port unit mounted on the outside of the front wall. While Figure 30 of Van Doren does depict a transfer robot mounted on forward and rear rails, Van Doren does not show the load port unit (cassette) mounted on the outside of the front wall either.

The decision of the Examiner with respect to claim 1 is reversed.

Claims 2 and 3 stand rejected under 35 U.S.C. § 103(a) as obvious over Hendrickson in view of Van Doren and Akimoto. Claims 4 and 6 stand rejected under 35 U.S.C. § 103(a) as obvious over Hendrickson in view of Van Doren, Teramachi or Sakino. Each of these rejections is reversed as the primary combination of Hendrickson and Van Doren fails to show the “load port unit is mounted on the outside of the front wall of said system body” as claimed.

### CONCLUSION

The obviousness rejections are reversed.

### REVERSED

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